

WORLD CLASS · EFFICIENCY · RELIABILITY

k|r|s|p

SINGLE STAGE ROTARY



Kaishan Compressor USA



WE MANUFACTURE **85%**
OF THE COMPRESSOR COMPONENTS INTERNALLY,
ENSURING QUALITY AND CONTROLLING COSTS

60+
YEARS
IN BUSINESS

**OVER
70,000**
COMPRESSORS
PRODUCED
A YEAR

3RD LARGEST
COMPRESSOR MANUFACTURER
IN THE WORLD



LOCATED IN
**LOXLEY, AL
USA**

KRSP SERIES COMPRESSORS PROVIDE LOW CAPITAL COST AND LOW OPERATING COST

Low cost of ownership throughout life cycle

Compressed air is often referred to as the "fourth utility" and is critical to most manufacturing operations. Facility performance depends upon compressor reliability and efficiency.

Power consumption is a significant cost throughout the life cycle of a compressor. Therefore, it is important to consider the life cycle cost of a compressed air system when evaluating productivity improvements. KRSP series advanced energy-saving features reduce operation costs significantly.



*KRSP Series "best in class"
rotor assembly*

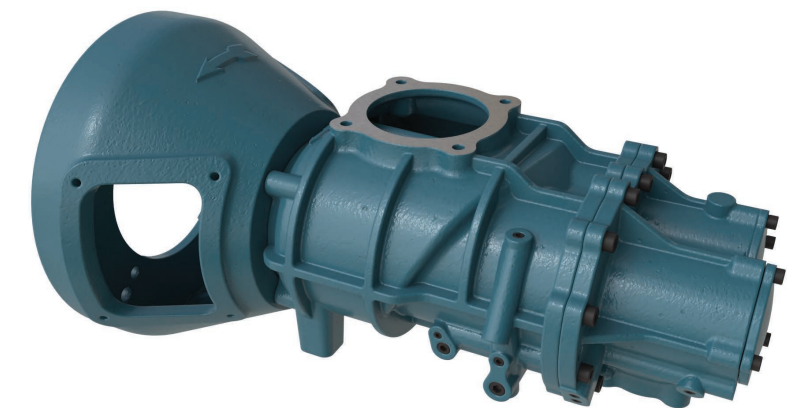
**LIFETIME
AIREND
WARRANTY**

WORLD CLASS ENGINEERING

INTERNATIONALLY PATENTED 'SKY' AIR END DEVELOPED EXCLUSIVELY BY KAISHAN ENGINEERS

Continued development has increased efficiency by more than 20% over earlier models

- **Direct drive (1:1 ratio) motor and air end** operate at slow speed
- **Low part load energy consumption**
- **Steady system pressure** lowers system stress and overall air demand
- **Slow speed rotors** maximize performance and increase reliability
- **Decreased energy consumption** delivers environmentally friendly savings
- **Quadruple SKF bearings** for durability and reliability
- **5 / 6 rotor profile** creates optimal performance while reducing energy consumption
- **Very tight tolerances** provide maximum efficiency
- **Direct flow inlet valve** provides reliable capacity control



KRSP Series patented air end

DIGITAL CONTROL PANEL

Monitors & Controls Key

Compressor Functions

- Protects compressor in the event of a fault
- Provides service required alert
- Sequencing of up to 16 compressors
- External monitoring via RS 485 interface
- WYE Delta starter is standard on all models
- MODBUS capability



INDUSTRIAL GRADE ELECTRICAL COMPONENTS

Increased Reliability / Lower Servicing Cost

- Outstanding reliability
- Excellent component life
- Worldwide support
- Standard electrical parts available locally



HIGH EFFICIENCY ELECTRIC MOTORS

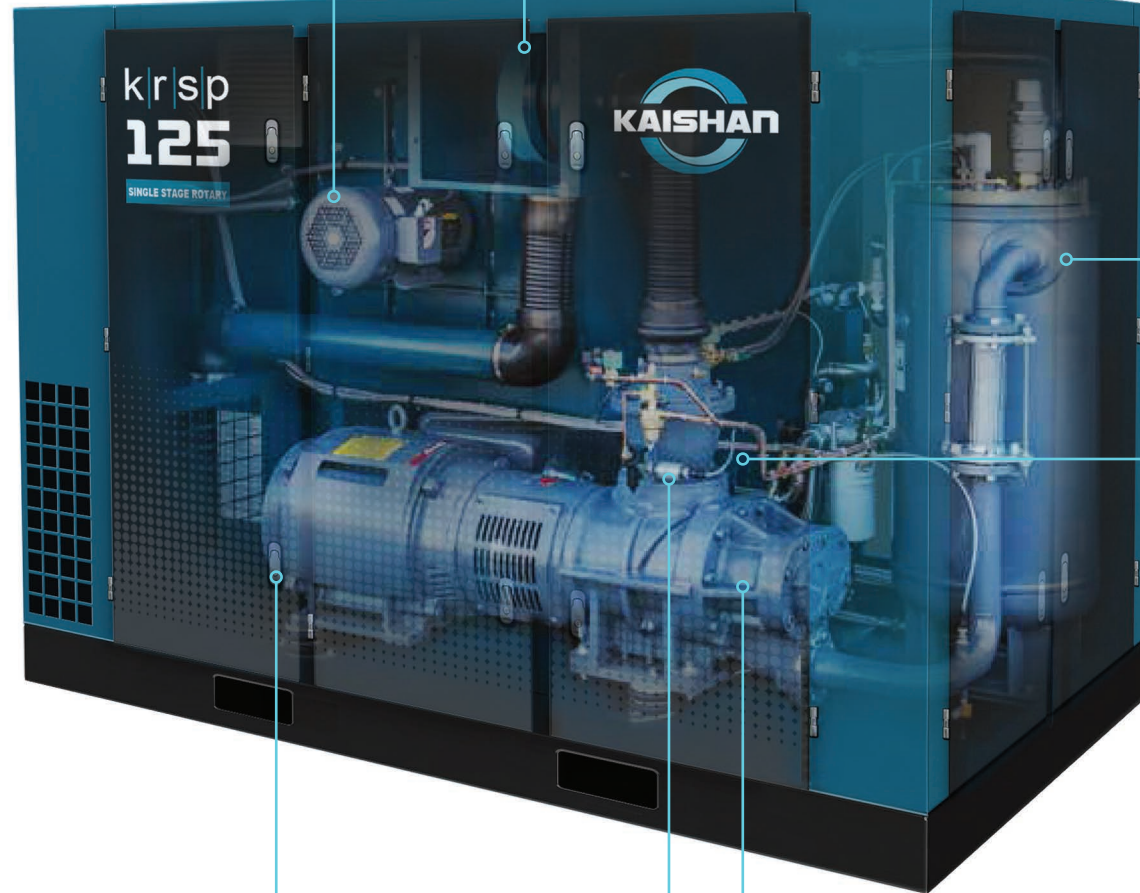
Long Operating Life / Lower Power Use

- Kaishan uses high efficiency motors, which comply with all international standards:
- Motors are standard TEFC to protect from dust and moisture
- Class F insulation
- Cooling air bypasses main compressor compartment resulting in lower component operating temperatures and longer life

CENTRIFUGAL COOLING FANS

Increased Cooling Efficiency

- Higher static pressure allows for energy-saving heat recovery
- Even air flow across the cooler face
- VSD cooling fan (150 HP and above) provides energy savings as cooling airflow is reduced during periods of light load or low temperatures.
- Cooling air bypasses main compressor compartment resulting in minimal internal dust build-up



316 STAINLESS STEEL CONTROL TUBING

Long Tubing Life / Reduced Downtime

- Increased reliability due to corrosion-free material
- Material such as nylon, copper or mild steel will fail in time causing downtime

'ULTRAWEB' AIR INTAKE FILTERS

Increased Filtration Efficiency

- Full airflow, low restriction, nanofiber technology
- Deep bed media ensures excellent dust capture
- Increased free air delivery for further savings in energy and running costs



3 STAGE TANGENTIAL OIL SEPARATION

Lower Pressure Drop / Lower Absorbed Power

- Excellent oil mechanical pre-separation/ reduced direct oil impingement onto separator element
- Lower dust contact resulting in lower pressure drop/longer element life/lower energy consumption
- Residual oil carryover limited to 3 ppm

LAMINAR FLOW INLET VALVE

Minimum Pressure Drop / Increased Output

- Laminar flow inlet valve results in lower pressure drop through the intake, in creasing output and saving energy

'SKY' SERIES AIR END

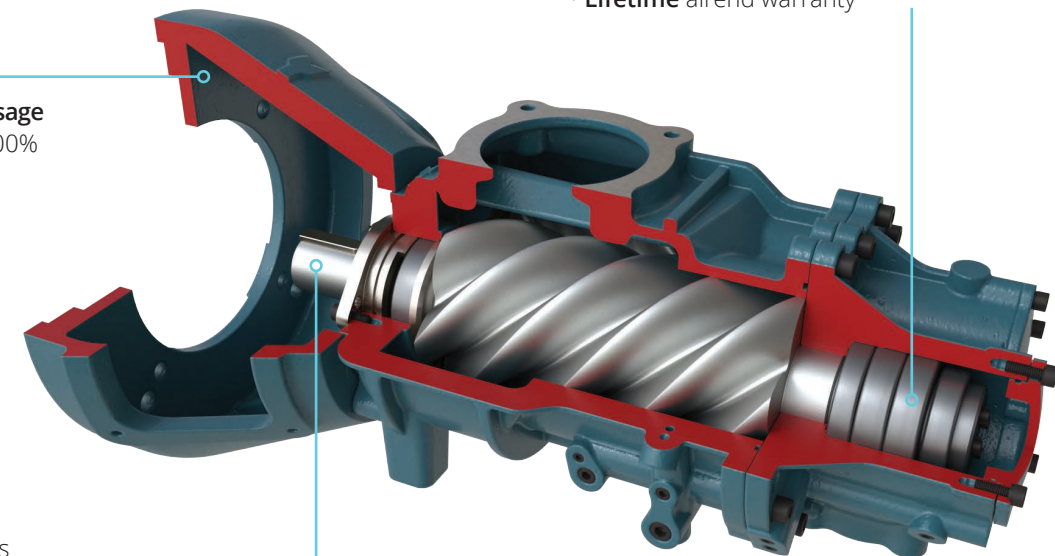
Maximum Output with Less Energy Usage

- Asymmetric 5 / 6 rotor profile with 100% SKF bearings
- KAPP Grinder rotor technology for tighter clearances and world class efficiency and performance
- Precision machined bell housing to maintain rigid alignment

DIRECT DRIVE - 1:1 DRIVE RATIO NO GEARBOX

Maximum Air Output/Reduced Energy Usage

- Large, slow running air end
- Eliminates transmission energy losses
- Increases bearing life
- Flexible coupling with easily removable coupling elements



SAFETY AND THE ENVIRONMENT

Reduced OSHA Risk and Injury

- The entire Kaishan range of compressors includes full safety features such as guarded rotating components and shrouded electrical components

SINGLE PASS OIL & AFTER COOLERS

Long Life / Easily Accessible

- Minimize thermal stress
- Cooler running temperatures / correct running temperature @ 122°F (50°C) ambient capable
- Low oil carryover increases bearing life
- Low cooling air velocity reduces dust build-up

QUADRUPLE DISCHARGE BEARINGS

Longer Bearing Life / Quieter Operation

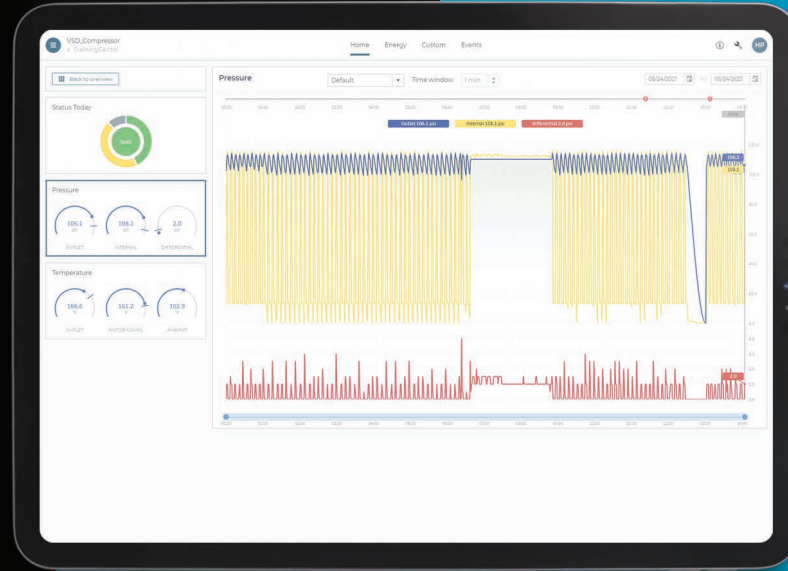
- The "SKY" series direct drive air ends use four discharge bearings to absorb radial and axial loads
- Longer bearing life under all operating conditions
- Increased load carrying capacity
- **Lifetime** airend warranty



Kaishan AirWatch

Our cloud-based compressor monitoring software provides real-time data analytics and trending on your Kaishan machines at your fingertips.

- Simple interface, easy to use and read
- Receive alerts and updates about status, health, and performance
- Quickly view analytics on duty cycles, airflow, pressure, power, and servicing intervals



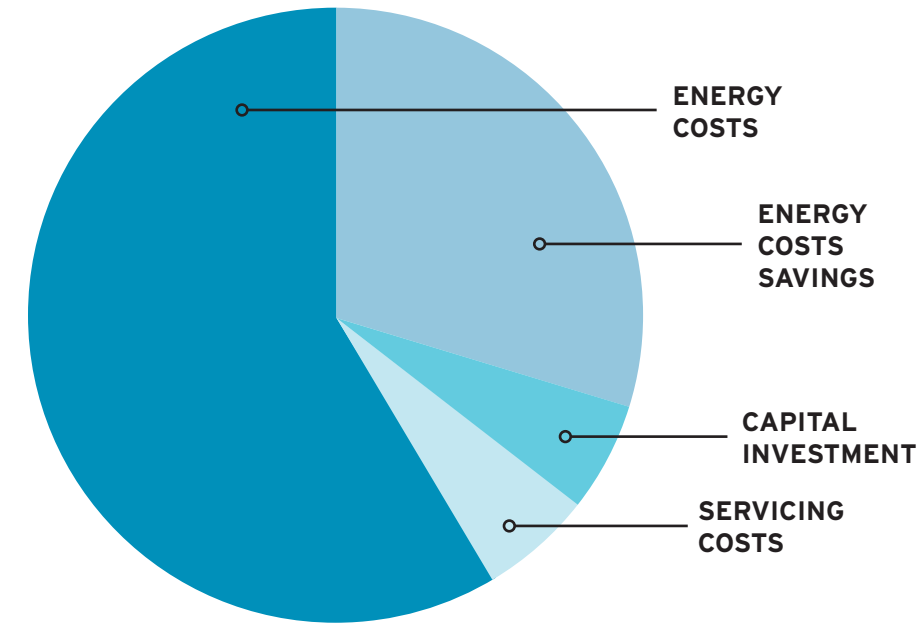
KRSP SERIES VARIABLE SPEED DRIVE PROVIDES A MAJOR ENERGY SAVINGS

KRSP VSD combines a robust power platform with a state-of-the-art control scheme

The drive provides a soft start and the ability to operate efficiently through the compressor's capacity range by matching flow to demand while maintaining a high level of pressure control. By eliminating wasted energy, cost savings as high as 35% or more are possible. With this level of savings, the additional capital cost of the variable speed drive can be recovered in less than one year's operation.



KRSP Series Variable Speed Drive



Variable Speed Drive

The variable speed drive used in KRSP compressors are renowned for:

- Efficient and reliable service
- Worldwide support

KRSP Series VSD Rotary Screw Compressor operating at 70% load compared to a fixed speed model.

KRSP SERIES FIXED SPEED

MODEL	POWER		FLOW (CFM / M3/min)								SOUND dBA	WEIGHT		DIMENSIONS (LxWxH)	
	HP	kW	115 psi	8 bar	125 psi	8.6 bar	150 psi	10 bar	175 psi	12 bar		lbs	ks	in	mm
KRSP-40	40	30	202	5.72	199	5.64	160	4.53	139	3.94	71	2271	1031	71x46x54	1803x1168x1372
KRSP-50	50	37	239	6.77	235	6.65	194	5.49	154	4.36	71	2359	1071	71x46x54	1803x1168x1372
KRSP-60	60	45	288	8.16	284	8.04	234	6.63	187	5.30	72	3660	1662	89x56x68	2261x1422x1727
KRPS-75	75	55	361	10.22	356	10.08	281	7.96	228	6.46	75	4012	1821	89x56x68	2261x1422x1727
KRSP-100	100	75	501	14.19	494	13.99	424	12.01	360	10.19	76	5490	2492	98x60x72	2489x1524x1829
KRSP-125	125	90	613	17.36	608	17.22	441	12.49	434	12.29	77	5864	2662	98x60x72	2489x1524x1829
KRSP-150	150	110	728	20.62	721	20.42	593	16.79	480	13.59	78	8135	3693	122x67x81	3099x1702x2057
KRSP-200	200	150	940	26.62	935	26.48	750	21.24	702	19.88	79	8973	4074	122x67x81	3099x1702x2057

MODEL	POWER		FLOW (CFM / M3/min)								SOUND dBA	WEIGHT		DIMENSIONS (LxWxH)	
	HP	kW	100 psi	7 bar	125 psi	8.6 bar	150 psi	10 bar	175 psi	12 bar		lbs	ks	in	mm
KRSP-250	250	190	1238	35.06	1172	33.19	973	27.55	749	21.21	80	11949	5425	140x75x91	3556x1905x2311
KRSP-300	300	220	1502	42.53	1405	39.79	1186	33.58	941	26.65	80	12645	5741	140x75x91	3556x1905x2311

KRSP SERIES VARIABLE SPEED

MODEL	POWER		FLOW (CFM / M3/min)								SOUND dBA	WEIGHT		DIMENSIONS (LxWxH)	
	HP	kW	100 psi	7 bar	115 psi	8 bar	125 psi	8.6 bar	150 psi	10 bar		lbs	ks	in	mm
KRSP-40	40	30	208	5.89	200	5.66	195	5.52	175	4.96	71	2403	1091	71x46x54	1803x1168x1372
KRSP-50	50	37	248	7.02	242	6.85	236	6.68	212	6.00	71	2711	1231	71x46x54	1803x1168x1372
KRSP-60	60	45	300	8.50	288	8.16	282	7.99	252	7.14	72	3660	1662	89x56x68	2261x1422x1727
KRPS-75	75	55	371	10.51	362	10.25	356	10.08	318	9.00	75	4012	1821	89x56x68	2261x1422x1727
KRSP-100	100	75	500	14.16	478	13.54	470	13.31	422	11.95	76	5292	2403	98x60x72	2489x1524x1829
KRSP-125	125	90	632	17.90	616	17.44	602	17.05	540	15.29	77	5864	2662	98x60x72	2489x1524x1829
KRSP-150	150	110	770	21.80	740	20.95	721	20.42	648	18.35	78	8334	3784	122x67x81	3099x1702x2057
KRSP-200	200	150	983	27.84	952	26.96	952	26.11	849	24.04	79	9083	4124	122x67x81	3099x1702x2057
KRSP-250	250	190	1243	35.20	1204	34.09	1164	32.96	1073	30.38	80	12658	5747	140x75x91	3556x1905x2311
KRSP-300	300	220	1492	42.25	1459	41.32	1395	39.50	1283	36.33	80	12897	5855	140x75x91	3556x1905x2311

150, 175, 200 PSI models available, consult factory.



MODEL	COMPRESSOR TYPE	FEATURES
KRSP2	30-500 HP Two Stage	Global leader in air compressor efficiency
KRSP	40-300 HP Single Stage	Patented 'SKY' air end, quadruple SKF bearings
KRSD	15-200 HP Single Stage	Direct drive, TEFC motor, low sound enclosure
KRSB	5-50 HP Single Stage	Belt drive optional tank & dryer packages
KRSL	Single Stage Low Pressure	Pressure as low as 45 PSI
KRSV	Rotary Screw Vacuum Pump	World class vacuum efficiency



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